

Title (en)

GAZE-BASED NON-REGULAR SUBSAMPLING OF SENSOR PIXELS

Title (de)

BLICKBASIERTE NICHT-REGULÄRE UNTERABTASTUNG VON SENSORPIXELN

Title (fr)

SOUS-ÉCHANTILLONNAGE NON RÉGULIER BASÉ SUR LE REGARD DE PIXELS DE CAPTEUR

Publication

**EP 4241439 A1 20230913 (EN)**

Application

**EP 22783361 A 20220831**

Priority

- US 202117490628 A 20210930
- FI 2022050561 W 20220831

Abstract (en)

[origin: US2023095462A1] An imaging system including: image sensor including pixels arranged on photo-sensitive surface; and processor configured to: obtain information indicative of gaze direction of user's eye; identify gaze position on photo-sensitive surface; determine first region and second region on photo-sensitive surface, wherein first region includes and surrounds gaze position, while second region surrounds first region; read out first pixel data from each pixel of first region; select set of pixels to be read out from second region based on predetermined sub-sampling pattern; read out second pixel data from pixels of selected set; generate, from second pixel data, pixel data of remaining pixels of second region; and process first pixel data, second pixel data, and generated pixel data to generate image frame(s).

IPC 8 full level

**H04N 5/00** (2011.01); **G06F 3/01** (2006.01)

CPC (source: EP US)

**G06F 3/012** (2013.01 - EP); **G06F 3/013** (2013.01 - EP US); **G06F 3/014** (2013.01 - US); **H04N 25/40** (2023.01 - US); **H04N 25/44** (2023.01 - EP);  
**H04N 25/75** (2023.01 - US)

Citation (search report)

See references of WO 2023052672A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**US 11871133 B2 20240109; US 2023095462 A1 20230330;** EP 4241439 A1 20230913; EP 4241439 B1 20240403;  
WO 2023052672 A1 20230406

DOCDB simple family (application)

**US 202117490628 A 20210930;** EP 22783361 A 20220831; FI 2022050561 W 20220831